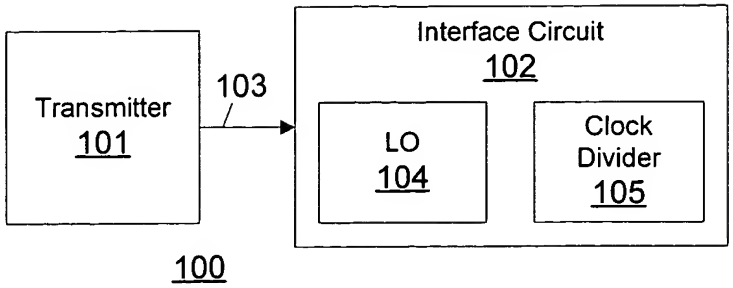


FIGURE 1

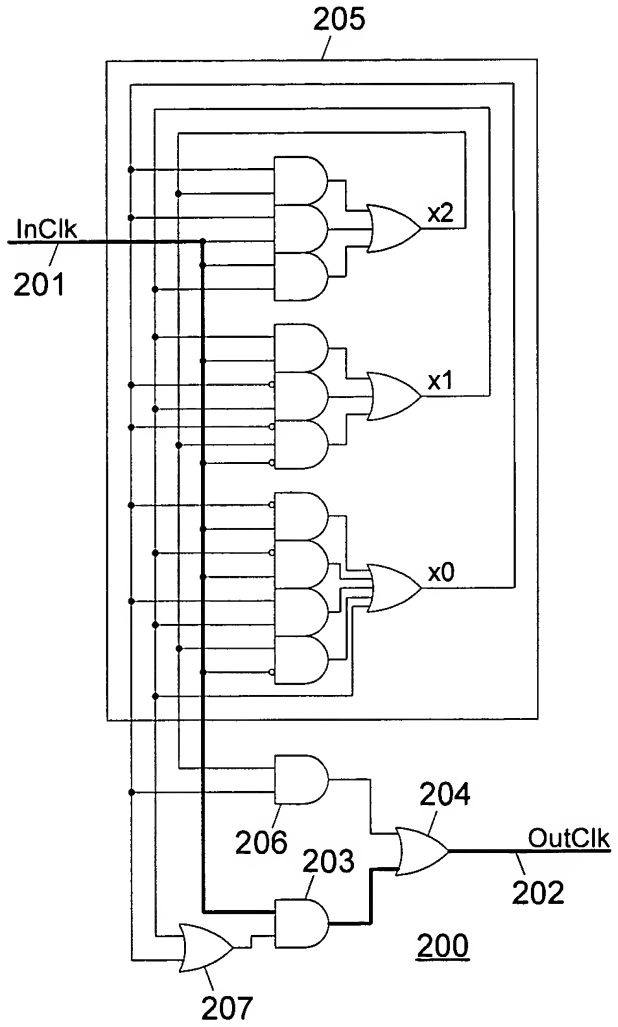


FIGURE 2

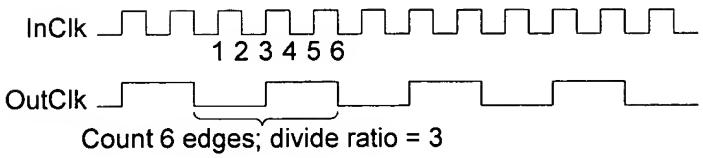


FIGURE 3

xn-1, ... , x2, x1, x0 \ C	0	1
Gray code 0		
Gray code 1		
Gray code 2		
Gray code 3		
...		
Gray code r		
Gray code r+1		
...		
Gray code 2^n-r-2		
Gray code 2^n-r-1		
...		
Gray code 2^n-3		
Gray code 2^n-2		
Gray code 2^n-1		

FIGURE 4A

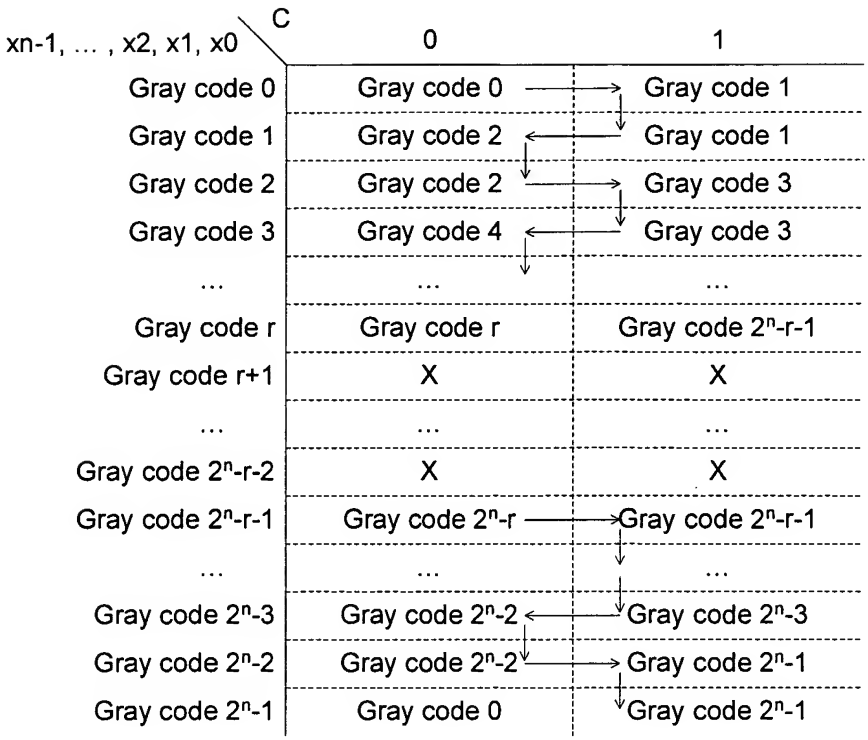

C
xn-1, … , x2, x1, x0
0
1
Gray code 0
Gray code 0
Gray code 1
Gray code 1
Gray code 2
Gray code 1
Gray code 2
Gray code 2
Gray code 3
Gray code 3
Gray code 4
Gray code 3
…
…
…
Gray code r
Gray code r
Gray code 2ⁿ-r-1
Gray code r+1
X
X
…
…
…
Gray code 2ⁿ-r-2
X
X
Gray code 2ⁿ-r-1
Gray code 2ⁿ-r
Gray code 2ⁿ-r-1
…
…
…
Gray code 2ⁿ-3
Gray code 2ⁿ-2
Gray code 2ⁿ-3
Gray code 2ⁿ-2
Gray code 2ⁿ-2
Gray code 2ⁿ-1
Gray code 2ⁿ-1
Gray code 0
Gray code 2ⁿ-1

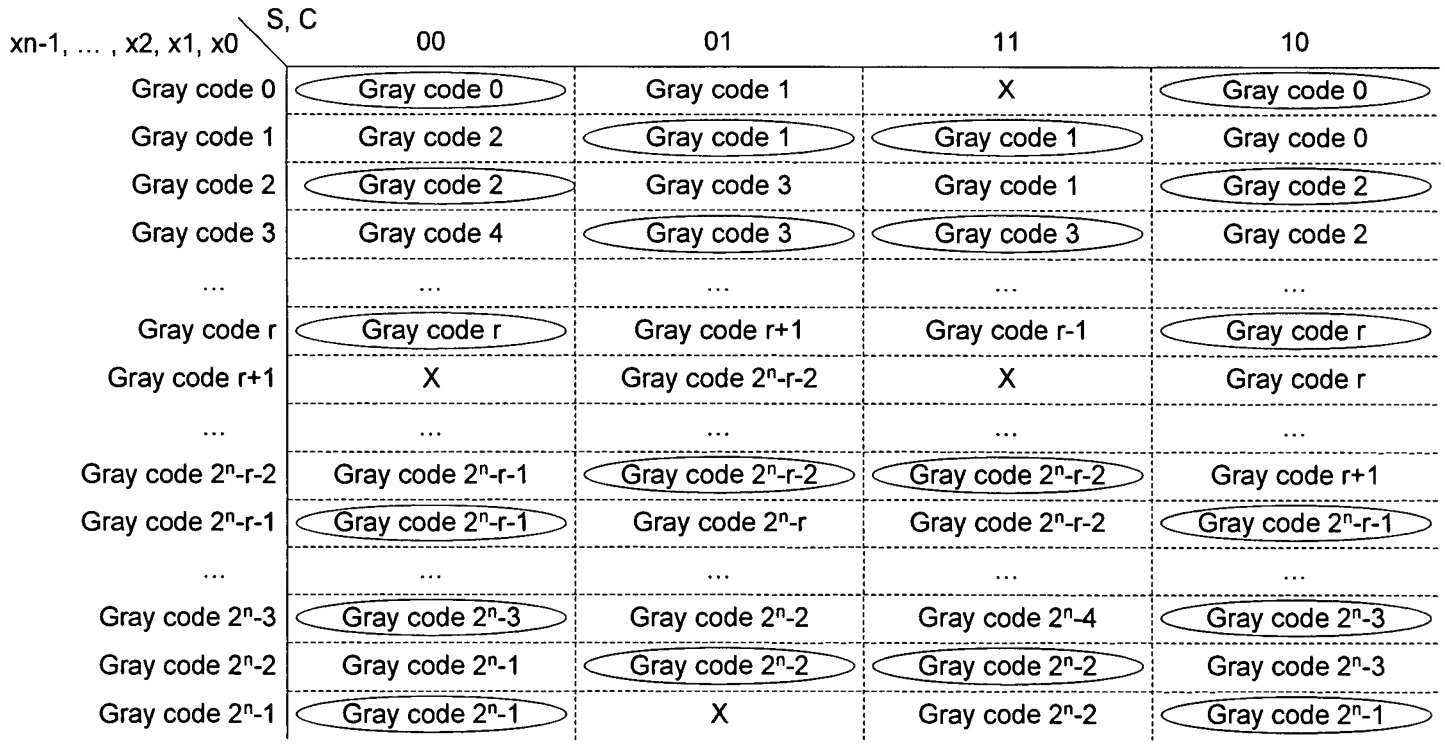
FIGURE 4B

xn-1, … , x2, x1, x0 \ C	0	1
Gray code 0	Gray code 0	Gray code 1
Gray code 1	Gray code 2	Gray code 1
Gray code 2	Gray code 2	Gray code 3
Gray code 3	Gray code 4	Gray code 3
…	…	…
Gray code r	Gray code r	Gray code 2^n-r-1
Gray code r+1	X	X
…	…	…
Gray code 2^n-r-2	X	X
Gray code 2^n-r-1	Gray code 2^n-r	Gray code 2^n-r-1
…	…	…
Gray code 2^n-3	Gray code 2^n-2	Gray code 2^n-3
Gray code 2^n-2	Gray code 2^n-2	Gray code 2^n-1
Gray code 2^n-1	Gray code 0	Gray code 2^n-1

FIGURE 4C

xn-1, … , x2, x1, x0 \ S, C	00	01	11	10
Gray code 0	0	0	X	1
Gray code 1	0	0	1	1
Gray code 2	0	0	1	1
Gray code 3	0	0	1	1
…	…	…	…	…
Gray code r	0	0	1	1
Gray code r+1	X	0	X	1
…	…	…	…	…
Gray code 2^n-r-2	0	0	1	1
Gray code 2^n-r-1	0	0	1	1
…	…	…	…	…
Gray code 2^n-3	0	0	1	1
Gray code 2^n-2	0	0	1	1
Gray code 2^n-1	1	X	1	1

FIGURE 4D



xn-1, … , x2, x1, x0 \ S, C	00	01	11	10
Gray code 0	Gray code 0	Gray code 1	X	Gray code 0
Gray code 1	Gray code 2	Gray code 1	Gray code 1	Gray code 0
Gray code 2	Gray code 2	Gray code 3	Gray code 1	Gray code 2
Gray code 3	Gray code 4	Gray code 3	Gray code 3	Gray code 2
…	…	…	…	…
Gray code r	Gray code r	Gray code r+1	Gray code r-1	Gray code r
Gray code r+1	X	Gray code 2^n-r-2	X	Gray code r
…	…	…	…	…
Gray code 2^n-r-2	Gray code 2^n-r-1	Gray code 2^n-r-2	Gray code 2^n-r-2	Gray code r+1
Gray code 2^n-r-1	Gray code 2^n-r-1	Gray code 2^n-r	Gray code 2^n-r-2	Gray code 2^n-r-1
…	…	…	…	…
Gray code 2^n-3	Gray code 2^n-3	Gray code 2^n-2	Gray code 2^n-4	Gray code 2^n-3
Gray code 2^n-2	Gray code 2^n-1	Gray code 2^n-2	Gray code 2^n-2	Gray code 2^n-3
Gray code 2^n-1	Gray code 2^n-1	X	Gray code 2^n-2	Gray code 2^n-1

FIGURE 4E

x2, x1, x0 \ C	0	1
000	000	001
001	011	001
011	011	111
010	X	X
110	X	X
111	101	111
101	101	100
100	000	100

FIGURE 5A

x2, x1, x0 \ C	0	1
000	0	0
001	0	0
011	0	1
010	X	X
110	X	X
111	1	1
101	1	1
100	0	1

x2

FIGURE 5B

x2, x1, x0 \ C	0	1
000	0	0
001	1	0
011	1	1
010	X	X
110	X	X
111	0	1
101	0	0
100	0	0

x1

FIGURE 5C

x2, x1, x0 \ C	0	1
000	0	1
001	1	1
011	1	1
010	X	X
110	X	X
111	1	1
101	1	0
100	0	0

x0

FIGURE 5D

x2, x1, x0 \ C	0	1
000	0	0
001	0	0
011	0	1
010	X	X
110	X	X
111	1	1
101	1	1
100	0	1

OutClk

FIGURE 5E

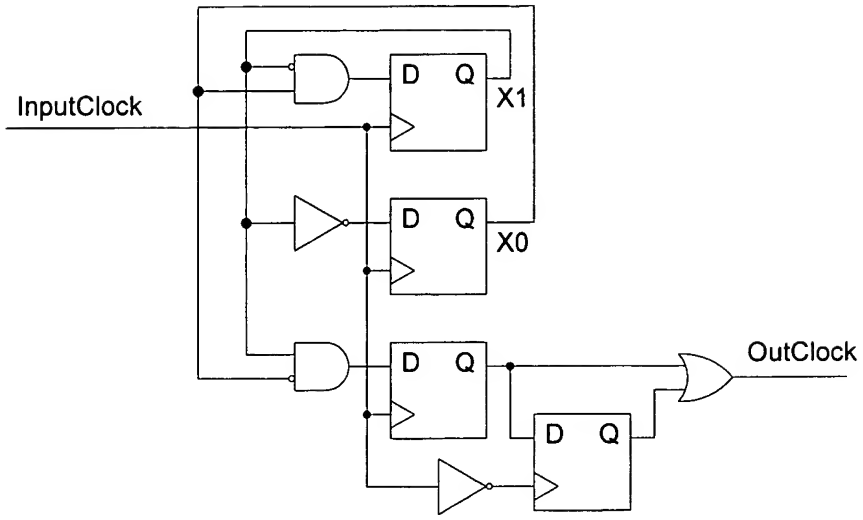


FIGURE 6